

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

**UNILOC USA, INC. and  
UNILOC LUXEMBOURG S.A.,**

**Plaintiffs,**

**V.**

**MEDICAL INFORMATION  
TECHNOLOGY, INC. D/B/A  
MEDITECH,**

**Defendant.**

**PICIS, INC.,**

**Defendant.**

**QUADRAMED CORP.,**

**Defendant.**

**N. HARRIS COMPUTER CORP.,**

**Defendant.**

**OPTUMINSIGHT, INC.,**

**Defendant.**

**NETSMART TECHNOLOGIES, INC.,**

**Defendant.**

**PRACTICE FUSION, INC.,**

**Defendant.**

**AMAZING CHARTS, LLC,**

**Defendant.**

1. *Journal of the American Medical Association*, 1997; 277: 1001-1005.

**CIVIL ACTION NO. 6:16-CV-00463-RWS  
(LEAD)**

**CIVIL ACTION NO. 6:16-CV-00465-RWS**

**CIVIL ACTION NO. 6:16-CV-00466-RWS**

**CIVIL ACTION NO. 6:16-CV-00467-RWS**

**CIVIL ACTION NO. 6:16-CV-00468-RWS**

**CIVIL ACTION NO. 6:16-CV-00470-RWS**

**CIVIL ACTION NO. 6:16-CV-00471-RWS**

**CIVIL ACTION NO. 6:16-CV-00472-RWS**

## **MEMORANDUM OPINION AND ORDER**

Before the Court are Motions to Dismiss by Defendants Picis, Inc., QuadraMed Corp., N. Harris Computer Corp., Netsmart Technologies, Inc. and Practice Fusion, Inc. (collectively, “Defendants”).<sup>1</sup> Defendants move to dismiss Plaintiffs Uniloc USA, Inc. and Uniloc Luxembourg S.A.’s (collectively, “Uniloc”) case because they allege that the patents Uniloc asserts are drawn to ineligible subject matter under 35 U.S.C. § 101. For the reasons that follow, Defendants’ motions are **GRANTED**.

### **BACKGROUND**

This is a consolidation of eight patent-infringement actions in which Uniloc asserts infringement of U.S. Patents Nos. 5,682,526 (“the ’526 Patent”), entitled “Method and System for Flexibly Organizing, Recording, and Displaying Medical Patient Care Information Using Field in a Flowsheet,” and 5,715,451 (“the ’451 Patent”), entitled “Method and System for Constructing Formulae for Processing Medical Data” (collectively, the “Asserted Patents”). Defendants are sellers of Electronic Health Record software products, which Uniloc accuses of infringement. *See* Docket No. 1 at ¶ 16.<sup>2</sup>

Uniloc has brought several patent-infringement actions on the Asserted Patents before. In one of those cases, *Uniloc USA, Inc. v. e-MDs, Inc.*, Case No. 6:14-cv-625 (“*e-MDs*”), the Court invalidated claim 1 of the ’526 Patent and claim 6 of the ’451 Patent as drawn to ineligible subject matter. *e-MDs*, Docket No. 315 (“*e-MDs* Order”) at 1 (E.D. Tex. Aug. 19, 2015). The Court

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<sup>1</sup> Docket No. 13 in Case No. 6:16-cv-465; Docket No. 14 in Case No. 6:16-cv-466; Docket No. 13 in Case No. 6:16-cv-467; Docket No. 16 in Case No. 6:16-cv-470; and Docket No. 13 in Case No. 6:16-cv-471.

<sup>2</sup> References to “Docket No.” are to the docket in lead Case No. 6:16-cv-463 unless specifically stated otherwise.

denied without prejudice the Motion to Dismiss in *e-MDs* with respect to the other claims of the Asserted Patents because the parties' arguments did not address those claims. *Id.* at 1, 10, 12–13.

Subsequently, in Case No. 6:16-cv-431, Defendants Texas Health Resources and Texas Health Presbyterian Hospital Denton filed a Motion to Dismiss challenging the patent-eligibility of the remaining claims of the Asserted Patents. *See* Docket No. 22 in Case No. 6:16-cv-431 (“the Motion”). Each of the moving Defendants in this action incorporates the Motion by reference without modification. Accordingly, the Court refers to the Motion for all of Defendants' opening arguments.

## LEGAL STANDARD

### I. Federal Rule of Civil Procedure 12(b)(6)

Under Federal Rule of Civil Procedure 12(b)(6), the Court must dismiss a complaint that does not state a claim for relief that is “plausible on its face.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). To state a plausible claim, Plaintiffs must plead facts sufficient to allow the Court to draw a reasonable inference that Defendants are liable for the alleged patent infringement. *See id.* (citing *Twombly*, 550 U.S. at 556). At this stage, the Court accepts all well-pleaded facts as true and views those facts in the light most favorable to the Plaintiffs. *Bustos v. Martini Club, Inc.*, 599 F.3d 458, 461 (5th Cir. 2010).

### II. Eligibility Under 35 U.S.C. § 101

In determining whether a claim is patent-ineligible under *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), the Court must “first determine whether the claims at issue are directed to a patent-ineligible concept.” *Alice*, 134 S. Ct. at 2355. Claims directed to software inventions do not automatically satisfy this first step of the inquiry. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Rather, “the first step in the *Alice* inquiry . . . asks

whether the focus of the claims is on [a] specific asserted improvement in computer capabilities . . . or, instead, on . . . an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335–36.

If the Court determines that the claims are directed to an abstract idea, it must then determine whether the claims contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application. *Alice*, 134 S. Ct. at 2357. An inventive concept is “some element or combination of elements sufficient to ensure that the claim in practice amounts to ‘significantly more’ than a patent on an ineligible concept.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014). The Court “consider[s] the elements of each claim both individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (internal quotation omitted). Even if each claim element, by itself, was known in the art, “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

### ANALYSIS

Uniloc argues that several significant events have occurred since the *e-MDs* ruling that justify reconsidering the prior finding of patent eligibility. Docket No. 24 at 3. According to Uniloc, these events are: (1) the PTAB denied in full a petition for *inter partes* review of the ’526 Patent and (2) the Federal Circuit has clarified the standard for patent-eligibility under *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014). *Id.* at 3–4 (citing *Enfish* and *Bascom*).

The denial of a petition for *inter partes* review is irrelevant to the eligibility analysis because patent-eligibility cannot be challenged in an *inter partes* review. *See* 35 U.S.C. § 311(b)

(limiting the scope of *inter partes* review to grounds that can be raised under 35 U.S.C. §§ 102 and 103). The Court addresses the effect of recent precedents on its *Alice* inquiry below.

### **III. *Alice* Step One**

The Court previously determined that the '526 Patent is directed to the abstract idea of “organizing medical data in a hierarchy” and the '451 Patent is directed to the abstract idea of “creating and storing user-constructed formulas.” *e-MDs* Order at 7, 11. For the reasons that follow, the Court’s previous determination remains correct.

#### **A. The '526 Patent**

Uniloc argues that under *Enfish*, the '526 Patent is not directed to the idea of “organizing medical data in a hierarchy” because the alleged abstract idea is “untethered to the language and character of the claims as a whole.” Docket No. 24 at 8 (citing *Enfish*, 822 F.3d at 1337). Uniloc states that “the key computer-related improvement emphasized throughout the '526 Patent, and indeed referenced in the patent title itself, is the particular ways of achieving *user-controlled customization* in flexibly designing specific structural aspects of a patient information hierarchy.” *Id.* (emphasis in original). Uniloc further argues the Court must credit any advantages the specification of the '526 Patent states the claimed inventions have over the prior art. *Id.* In reference to the prior art, Uniloc argues that the claimed invention addresses drawbacks with prior art “general-purposes databases and rigid patient information databases.” *Id.* at 8–9 (citing '526 Patent at col. 1:58–62). Uniloc argues that the claims’ ability to be performed on a general-purpose computer does not doom their eligibility. *Id.* at 9. Uniloc further argues that “the distinction between independent claims is significant because it affirms they could not possibly all be solely directed to the same abstract idea.” *Id.* at 10. Rather, Uniloc argues, “the independent claims are directed to independent inventions, each one reciting a precisely ordered process implementing a respective solution.” *Id.*

Defendants reply that the remaining claims are not directed to computer-related improvements. Case. No. 6:16-cv-470, Docket No. 26 (“Reply”) at 2–3. They argue that under *Enfish*, the relevant inquiry at *Alice* step one is “whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* (citing *Enfish*, 822 F.3d at 1335–36). Discussing *Enfish*, Defendants state that “[t]he asserted claims [in *Enfish*] were a ‘specific implementation of a solution to a problem in the software arts’: namely, that the structural requirements of prior art ‘relational’-model databases required a programmer to predefine a structure, and subsequent data entry had to conform to that structure. *Id.* (citing *Enfish*, 822 F.3d at 1339). Defendants argue that the instant claims are distinguishable from those in *Enfish* because the instant claims “simply claim[] the use of a computer as a tool” whereas those in *Enfish* “claimed **how** a computer can store information in a specific way, not some process that simply took advantage of a computer’s generic ability to store information as is the case here.” *Id.* at 4–5 (emphasis in original).

*Enfish* does not disturb the previous holding of the Court that the ’526 Patent is directed to “organizing medical data in a hierarchy.” *e-MDs* Order at 7. Although the patent in *Enfish* and the ’526 patent both distinguish a claimed data structure from prior art databases, the distinctions are not for the same reasons. In *Enfish*, the claimed invention purported to be a first-of-its-kind self-referential table, the use of which would improve the functioning of a computer. *Enfish*, 822 F.3d at 1336. By contrast, the ’526 Patent never claims to have invented hierarchical data structures, only that the inventor was the first to use such a data structure with medical data, which produced advantages in the handling of that data over previous systems. Accordingly, while the

claimed invention of *Enfish* was “directed to” improving the functioning of a computer, the instant invention merely uses the computer in a purportedly novel application.

“Organizing medical data in a hierarchy” is not untethered from the language of the claims or their character as a whole as Uniloc asserts. The preamble of the claims provides the tether between “organizing medical data in a hierarchy” and the claimed invention. The Court disagrees that “organizing medical data in a hierarchy” is too general to describe the claims as a whole; however, even if that specific language were too general, that would not be fatal to the Motion because an abstract idea can be described at different levels of abstraction. *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). The effect of the various limitations of the claims on their “character as a whole” is better examined under step two of *Alice* in searching for an inventive concept.

In sum, the claims of the ’526 Patent are directed to the abstract idea of “organizing medical data in a hierarchy.”

**B. The ’451 Patent.**

Uniloc argues that the ’451 Patent is not directed to an abstract idea, but rather to specific implementations of solutions to a computer-related problem. Docket No. 24 at 30. Uniloc argues that “[a]ll claims require that the *software itself* must construct the specifically recited programming (referred to in the claims as a ‘formula’), which has a specialized purpose explicitly recited in the claims.” *Id.* (emphasis in original). Uniloc further argues that “the construction and storage of an entirely new ‘formula’ having an explicitly recited special purpose achieved through specific algorithmic structure” renders the claims patent-eligible. *Id.* at 30 n.17. Uniloc also argues that the ’451 Patent cannot be directed to the abstract concept of “creating and storing user-created formulas” because the claims’ requirement that the formula be created by the software

makes the alleged abstraction “untethered from the language of the claims.” *Id.* at 30–31 (quoting *Enfish*, 822 F.3d at 1337).

Uniloc next argues that the claims of the ’451 Patent are patent-eligible because they address purported drawbacks with prior art systems and have advantages over those systems. *Id.* at 31. Moreover, Uniloc asserts that that the claimed invention solved computer-related problems in the art at the time:

[S]oftware applications did not come preloaded with certain algorithmic processes required by particular medical practices; and not all users had the programming skills necessary to write computer-readable code for customized algorithms sophisticated enough to generate preliminary medical judgments and treatment recommendations based on a conditional logic and formulaic calculations.

*Id.* Uniloc also asserts that claimed invention enables almost “any user to interact with the software in a manner that resulted in *the computer system effectively programming itself* with a new algorithm or ‘formula’ having a customized purpose.” *Id.* (emphasis in original).

Uniloc next argues that the claims are not abstract because “the claims consistently make an intentional and unambiguous distinction between the basic input received [including, for example, mathematical functions] and the subsequent detailed algorithmic structure of the ‘formula’ constructed by the software.” *Id.* at 32. Uniloc also argues that “[t]he specific user-customization improvements emphasized throughout the ’451 Patent and its claims are analogous to those deemed patent eligible by the Federal Circuit in *Enfish* and *Bascom*.” *Id.*

Defendants reply that “the ’451 [P]atent stands in stark contrast to *Enfish* and *Bascom*.” Reply at 6. Defendants argue that rather than a non-abstract improvement to computer technology, the ’451 Patent claims “a method of constructing formulae for processing medical data on a computer—that is, a method to automate patient information maintenance.” *Id.* Defendants argue that the claims are directed to abstract ideas because any purported improvement is non-technical and because the claims do not offer particular instructions for achieving the claimed steps. *Id.* at



6–7. Finally, Defendants argue that the claims are like the ones held to be directed to abstract ideas in *Electric Power Group*, 830 F.3d 1350 (Fed. Cir. 2016), and *Affinity Labs. Of Texas, LLC v. DirecTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016). *Id.* at 8–9.

None of Uniloc’s arguments persuade the Court to depart from its previous holding that the ’451 Patent is directed to the abstract idea of “creating and storing user-constructed formulas.” “Creating and storing user-constructed formulas” does not conflict with, and is not untethered from, the language of the claims. Although Uniloc argues that the software and not the user constructs the “formula” of the claims, Uniloc admits that the user supplies the inputs to the formula—the data to be analyzed and the selection function to be used. Once the user defines a set of time-indexed data points (e.g., { 1, 2, 3 }) and selects an analytic function to apply to that set (e.g., “maximum”), the claimed invention “stor[es] a formula for applying the identified selection function to . . . the identified time-indexed medical data.” ’451 Patent, col. 11:19–21. In other words, the claimed software comes pre-loaded with the definition of “maximum” and, when a user selects “maximum” and a subset of data, the invention “stor[es] a formula” for finding the maximum value of the data set. To the extent Uniloc characterizes the computer as “programming itself,” its construction implausibly overstates the involvement of the computer in producing the formula. A characterization of the claims under which the computer “creates and stores” a formula that is “constructed” by the user is not untethered from the language of the claims.

The claimed invention does not improve the functioning of a computer. Uniloc is incorrect that the claimed invention being “preloaded with algorithmic processes” or too difficult for the user to program for himself indicates otherwise. Preloading software with standard statistical functions does not improve the functioning of a computer. Similarly, that some users might be unable to program the claimed software does not render it patent-eligible. Under Uniloc’s view, a

patentee could claim an abstract concept with the words “apply it on a computer,” and that claim would be eligible if applying the abstract idea on a computer were difficult to accomplish. Uniloc’s view must be rejected because it is contrary to the holding that claiming an abstract concept with the words “apply it on a computer” is not patent-eligible. *See Alice*, 134 S. Ct. at 2358.

Uniloc’s argument that the claims are not directed to abstract ideas because they distinguish between the input data and “the subsequent detailed algorithmic structure of the ‘formula’ constructed by the software” is also unavailing. The claims never describe a “detailed algorithmic structure” of the claimed “formula.” The claims only describe the formula as applying the “identified selection function” to the “identified time-indexed medical data” to “derive and display a medical conclusion from the . . . data input.” The claims do not necessarily change the data in any way in applying a “selection function”; as the name suggests, the “selection function” may involve as little as choosing one of the data points (e.g., the largest value in the selected range) for display.

Finally, the Court agrees with Defendants that this case is like *Electric Power Group*. In that case, the Federal Circuit wrote:

Information as such is an intangible. Accordingly, we have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas. In a similar vein, we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category. And we have recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.

830 F.3d at 1354 (citations omitted). In this case, the medical information is intangible, and collecting and applying algorithms to the data to produce “formulas” is within the realm of abstract ideas. Most of the claims do not require any display or presentation of the “formula” or a derivative

thereof, and the claims that require display do so “as an ancillary part of [the claimed] collection and analysis.” *See id.*

In sum, the claims of the ’451 Patent are directed to the abstract idea of “creating and storing user-constructed formulas.”

#### **IV. *Alice* Step Two**

At the second step of the *Alice* eligibility inquiry, the Court evaluates “whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer” (i.e., provide an inventive concept). *Alice*, 124 S. Ct. at 2359. The Court first analyzes the claim elements separately and then as an ordered combination. *Id.* at 2359–60.

##### **A. Claim 1 of the ’526 Patent**

Claim 1 of the ’526 Patent has already been determined to lack an inventive concept. *e-MDs Order* at 10. The Court held that the claimed steps amount to “electronic recordkeeping.” *Id.* at 8. Specifically, the Court found that the “linking” term is substantially the same as other general processing terms that do not meaningfully limit the abstract idea. *Id.* at 9–10. The Court considered the limitations as an ordered combination and found that “[v]iewed as a whole, the claimed method simply recites the abstract idea of organizing medical data in a hierarchy on a computer.” *Id.* at 10.

Uniloc argues this was incorrect. Uniloc states that the combination of the first two steps of claim 1—“receiving an instruction from a user to create a new parameter within the patient information hierarchy” and “in response to step (a), creating a new parameter within the patient information hierarchy”—is a “particular way of structurally configuring the hierarchy *itself* involving the creation of one or more new data fields.” Docket No. 24 at 18 (emphasis in original). They state that creating new data fields requires significantly more than merely organizing medical data in a hierarchy. *Id.* Uniloc makes similar arguments with respect to paired steps (c)–(d), and

(e)–(f). *Id.* at 18–19. Uniloc characterizes the “ ‘linking’ customization” as “the culmination of the preceding steps.” *Id.* at 19. Uniloc also states the claims provide an inventive concept because the specification states that the claimed invention has certain advantages over the prior art. *Id.* at 19–20. Uniloc argues that the PTAB’s finding that the claims are not likely anticipated shows that linking was not a routine function of computers. *Id.* at 21. Finally, Uniloc states that claim 1 expressly defines how linking must be performed and, therefore, the linking step is not routine or generic. *Id.* at 21–22.

Uniloc’s arguments are not persuasive. As discussed above, the PTAB’s findings with respect to Sections 102 and 103 do not show that claim 1 is patent-eligible under Section 101. Although the ’526 Patent purports to disclose the first application of hierarchical data formats to medical data and the claims may therefore satisfy Sections 102 and 103, a field-of-use limitation such as the requirement for medical data does not sufficiently limit the concept of hierarchical data formats to confer eligibility under Section 101. *See Elec. Power Grp.*, 830 F.3d at 1354 (“Most obviously, limiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.”)

Moreover, creating a new data field to accommodate a new data point is inherent to, and therefore does not meaningfully limit, using a hierarchical data format. Similarly, specifying values to populate those fields does not meaningfully limit the idea of using a hierarchical data format. Even considering the ordered combination of steps, claim 1 does not recite a particular way of structuring the hierarchy because it recites the basic steps of making a hierarchy at all.

In sum, the Court’s previous conclusion that claim 1 of the ’526 Patent does not contain an inventive concept stands. *e-MDs* Order at 10.

## **B. Claims 2 and 3 of the '526 Patent**

Defendants argue that claims 2 and 3, which depend from claim 1, are invalid because the additional limitations they provide are insufficient to save their validity. Docket No. 22 at 14. Specifically, Defendants argue that claim 2's additional "receiving," "specifying" and "creating" steps amount to electronic recordkeeping, even considering what Defendants characterize as the claimed "display-and-selection process." *Id.* at 15 (citing *E-MDs*, Docket No. 315 at 8).<sup>3</sup> Defendants argue that claim 3's additional limitations also amount to electronic recordkeeping and single out the conditional display of a linked-to parameter<sup>4</sup> as not supplying an inventive concept. *Id.* at 15–16.

Uniloc argues that claims 2 and 3 are not directed to conventional functionality. Docket No. 24 at 22. Uniloc states that claim 2 "further limits step (e) of Claim 1 by expanding it into three precisely ordered subparts (e)(1)–(e)(3)." *Id.* Uniloc argues that the required display and selection of parameters provides an inventive concept. *Id.* Uniloc argues that claim 3's steps set forth "the actions for achieving the automatic display of 'linked-to parameters' according to the logical 'linking' structure customized by the user in claim 1. *Id.*

The Court agrees with Defendants. In the display-and-selection process of claim 2, the user assigns a parameter label to a datum (like assigning the parameter "Systolic Pressure" to the

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<sup>3</sup> In the "display-and-selection process" of claim 2, the claimed software "display[s] a representation of the patient information hierarchy showing the parameters contained therein; and receiv[es] one or more indications each indicating that an indicated parameter . . . has been selected as a linked-to parameter by the user."

<sup>4</sup> Claim 1 provides for conditional linking between two parameters if the first parameter has certain values. For example, if the linked-from parameter is heart rate and has a result value of 175, heart rate could be linked to a second, linked-to parameter like a warning that the patient may be suffering from tachycardia.

value 140<sup>5</sup>). This is a traditional record-keeping function. Uniloc does not claim a particular way of accomplishing it but rather claims a broad class of methods in which this record-keeping function occurs. Similarly, conditional display of a warning or the like in response to certain values does not provide an inventive concept. *See Parker v. Flook*, 437 U.S. 584 (1978) (holding a method of updating an alarm limit was not patent-eligible).

The Court notes that claim 3 is also like the claim in *Mayo Collaborative Servs. v. Prometheus Labs.*, 566 U.S. 66 (2012) in that it attempts to monopolize the use of a computer to provide clinical instructions based on the medical relationships between, for example, a high heart rate and certain medical interventions that a high heart rate might indicate or contraindicate. But because *Mayo* only concerned the relationship between one kind of metabolite and the dosage of one kind of drug, 566 U.S. at 73–74, it is less preemptive than claim 3, which claims the use of a computer to implement any medical relationship the user of the claimed software might think of. That the patent in *Mayo*, which was drawn to ineligible subject matter, is less preemptive than claim 3 further confirms that claim 3 contains no inventive concept.

### **C. The Remaining Claims of the '526 Patent**

The Court has reviewed the remaining claims of the '526 Patent and the parties' arguments with respect to their patent-eligibility. Considering the limitations of each claim of the '526 Patent individually and as ordered combinations, none of the claims provides an inventive concept.

First, “encapsulating one or more . . . parameters” as recited in claims 4–9 does not provide an inventive concept. *See* '526 Patent, col. 13:54. Rather, the '526 Patent makes clear that “to encapsulate” is to categorize, with the “encapsulating parameter” being the name of the category

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<sup>5</sup> The assignment of the units is not recited in claim 3. In this example, the user might pre-set the units for “Systolic Pressure” as mmHg.

and the “escapsulated parameters” being members of the category. Putting parameters into larger categories, even combined with a selective (or collapsible and expandable) display of the categorized parameters, does not meaningfully limit the concept of putting information in a hierarchy. Indeed, the concept of an information hierarchy requires successive categorizations (i.e., categorization of parameters followed by higher-order categorization of lower-order categories).

Second, that the individual claims may differ from each other slightly does mean they all have inventive concepts. For example, just because claim 10 contemplates using placeholders for un-received result values, whereas claim 1 creates a new data cell upon receiving a result value, does not show that the claims meaningfully limit the idea of hierarchical data structures. Rather, the minor differences between the claims evince the ’526 Patent’s preemption of every variant of a hierarchical data structure used to record medical data. Ignoring the field-of-use limitation, the ’526 Patent amounts to no more than a patent on the abstract idea of hierarchical data formats.

#### **D. Claim 6 of the ’451 Patent**

The Court previously held that claim 6 of the ’451 patent has no inventive concept. *e-MDs* Order at 12. Uniloc argues that the Court was incorrect and relies on the claimed steps of using the stored medical data values to “derive and display a medical conclusion” to rescue the claim 6’s eligibility. Docket No. 24 at 40–41. As discussed above, deriving and announcing medical conclusions based on certain data and known medical relationships amounts to little more than stating a medical relationship with the instructions to apply it on a computer. *See Mayo*, 566 U.S. at 79–80.

The ’451 Patent makes no claim to any medical judgment independent from a human being. It only recites being able to automatically display pre-programmed “conclusions” derived from the medical knowledge of software programmers and users. Thus, in addition to the reasons discussed

in the *e-MDs* Order, claim 6 of the '451 Patent contains no inventive concept because it improperly preempts the use of a computer to recite and apply medical relationships to medical data.

#### **E. The Remaining Claims of the '451 Patent**

As discussed above, the claimed software of the '451 Patent facilitates the construction of a “formula” based on the user input. For example, claim 1 requires that the user select a subset of time-indexed medical data (e.g., heart-rate data collected from 4:30 to 5:00 on a given afternoon), that the user select a function for reducing that data to a single value (e.g., the mean), and that the user specify a manner for manipulating the single value to produce a textual string conveying information (e.g., specifying, “During the analyzed period, the patient’s mean heart rate was [the derived value].”). Claim 1 recites that, based on the foregoing, the claimed software creates a formula that specifies how to identify the relevant time-indexed medical data, apply the selected function, and manipulate the derived single value into a text string.

Each of the receiving and displaying steps is electronic recordkeeping. In the case of the time-indexed medical data, the recordkeeping aspect of the claims is readily apparent. Recording the selection of a function is just the recording of a different kind of data. Similarly, displaying the pre-programmed functions for selection is to maintain a record of available functions and to display it. These limitations do not provide an inventive concept.

Creating a formula “based on the receiving steps,” '451 Patent, col. 9:52, also does not provide an inventive concept. Creating a formula is the act of combining the user’s selected data, the user’s selection of a function, the (unclaimed) programmer’s definition of that function and the user’s instructions about how to incorporate the value derived from the function into a textually-presented medical conclusion. Claim 1 does not, however, explain how this combining is accomplished, only that it is accomplished “such that the formula may be used to generate and display a textual string conveying patient information based on the values of the selected time-



indexed medical data variable.” Thus, claim 1 essentially recites a result rather than a process and, accordingly, contains no inventive concept. *See Elec. Power Grp.*, 830 F.3d at 1356 (“Indeed, the essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101 . . .”).

The dependent claims provide limitations that are not meaningful or merely add insignificant post-solution activity. For example, giving and displaying a “name” for a “medical data variable” (claim 2) (e.g., naming a data stream that comes from a heart-rate monitor “Pulse”) is insignificant post-solution activity. Similarly, specifying that the single value derived from the selected function be numerical (claim 4) is not a meaningful limitation on the idea of deriving and displaying a single value.

In sum, the ’451 Patent claims insufficiently limit the concept of “storing and creating user-constructed formulas” and therefore improperly preempt using a computer to accomplish the long-standing practice of analyzing medical data using statistical methods and medical knowledge to derive a medical conclusion. Because the claims use generic computer technology (i.e., general-purpose computers and hierarchical data formats *per se*) to accomplish the fundamental medical process of ascribing medical meaning to data, they are drawn to patent-ineligible subject matter and are invalid under 35 U.S.C. § 101.

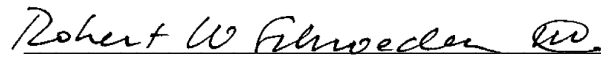
## CONCLUSION

For the reasons above, the Court finds that all claims of the ’526 and ’451 Patents are drawn to ineligible subject matter. Accordingly, it is

**ORDERED** that the Motions to Dismiss (Docket No. 13 in Case No. 6:16-cv-465; Docket No. 14 in Case No. 6:16-cv-466; Docket No. 13 in Case No. 6:16-cv-467; Docket No. 16 in Case No. 6:16-cv-470; and Docket No. 13 in Case No. 6:16-cv-471) are hereby **GRANTED**; it is further

**ORDERED** that all claims asserted by Uniloc against Defendants in this actions are  
**DISMISSED WITH PREJUDICE.**

**SIGNED this 30th day of March, 2017.**

  
ROBERT W. SCHROEDER III  
UNITED STATES DISTRICT JUDGE